to prevent a human cancer: a liver cancer, known as a hepatoma, that can develop as a complication of infection from the hepatitis B virus.

One of Dr. Hilleman's goals was to develop the first licensed vaccine against any viral cancer. He achieved it in the early 1970s, developing a vaccine to prevent Marek's disease, a lymphoma cancer of chickens caused by a member of the herpes virus family. Preventing the disease helped revolutionize the economics of the poultry industry. Dr. Hilleman's vaccines have also prevented deafness, blindness and other permanent disabilities among millions of people, a point made in 1988 when President Ronald Reagan presented him with the National Medal of Science, the Nation's highest scientific honor.

Because scientific knowledge about viruses was so limited when he began his career, Dr. Hilleman said that trial and error, sound judgment and luck drove much of his research. Luck played a major role in the discovery of adenoviruses. Dr. Hilleman flew a team to Missouri to collect specimens from troops suffering from influenza. But by the time his team arrived, influenza had died out. Fearing that he would be fired for an expensive useless exercise, Dr. Hilleman seized on his observation of the occurrence of a fresh outbreak of a different disease. His team discovered three new types of adenoviruses among the troops.

In the early 1950s, he made a discovery that helps prevent influenza. He detected a pattern of genetic changes that the influenza virus undergoes as it mutates. The phenomenon is known as drift—minor changes—and shift—major changes. Vaccine manufacturers take account of drift in choosing the strains of influenza virus included in the vaccines that are freshly made each influenza season. Shifts can herald a large outbreak or pandemic of influenza, and Dr. Hilleman was the first to detect the shift that caused the 1957 Asian influenza pandemic. He read an article in the New York Times on April 17, 1957, about influenza among infants in Hong Kong—cases that had escaped detection from the worldwide influenza surveillance systems. At the time, he directed the central laboratory for worldwide military influenza surveillance and was sure that the cases represented the advent of an influenza pandemic. So he immediately sent for specimens from Hong Kong and helped isolate a new strain of influenza virus. He also demanded that breeders keep roosters that would otherwise have been slaughtered so they could fertilize enough eggs to prepare 40 million doses of influenza to protect Americans against the 1957 influenza strain.

Standing tall at six-foot-one and wearing reading glasses that rested on the tip of his nose, Dr. Hilleman described himself as a renegade. He often participated in scientific meetings, where he could be irascible while amusing his colleagues with profane asides. At one of many meetings with this physician-reporter, a Thanksgiving Day dinner during a conference at the World Health Organization in Geneva in the 1980s, Dr. Hilleman said he was driven by a goal to get rid of disease and by a belief that scientists had to serve society.

Maurice Ralph Hilleman was born on Aug. 30, 1919, in Miles City, MT. His mother and twin sister died during his birth. In 1937, he went to work in the local J. C. Penney's store where he helped cowpokes, as he described his customers, pick out chenille bathrobes for their girlfriends, and he was well on the way to a career in retailing until his oldest brother suggested that he go to college. After graduating from Montana State University in 1941, he received his Ph.D. in microbiology from the University of Chicago and then joined E. R. Squibb & Sons. There, he developed a vaccine against Japanese B encephalitis to protect American troops in the World War II Pacific offensive. In 1948, he moved to the Walter Reed Army Medical Center and stayed until 1957, when Vannevar Bush, then chairman of Merck and a former director of the Federal Office of Scientific Research and Development in World War II, persuaded him to direct a virus research program for the drug company.

After retiring as senior vice president for Merck research laboratories in 1984, Dr. Hilleman continued to work on vaccines, saying they were needed for at least 20 diseases, including AIDS. Dr. Hilleman is survived by his wife, Lorraine, a retired nurse; two daughters, Jeryl Lynn of Palo Alto, CA., and Kirsten J. of New York City; two brothers, Victor, of Fontana, CA., and Norman, of Santa Barbara, CA.; and five grandchildren. His daughter Jeryl Lynn is at least in part responsible for the mumps vaccine. In 1963, when her salivary glands started to swell with the disease, Dr. Hilleman swabbed her throat and went on to isolate the virus. He then weakened it and within 4 years had produced the now-standard mumps vaccine. The weakened strain bears her name.

Mr. President, it is an honor for me to pay my respects to such a great and accomplished man as Dr. Maurice Hilleman. And it is an honor for me to call him a fellow Montanan.

ADDITIONAL STATEMENTS

100 YEARS OF EXEMPLARY SERVICE

• Mr. INOUYE. Mr. President, on April 15, the U.S. Army Corps of Engineers, Honolulu Engineer District, HED, will celebrate 100 years of exemplary service to Hawaii, the Pacific region, the U.S. military and the Nation.

For an entire century, the District has served with pride and distinction. I have personally witnessed their hard work and dedication to improve the lives of our fellow citizens in many ways. They have never failed to answer the call.

The District has had a significant impact on the ability of our servicemen and women to fight the global war on terror; it has bolstered the region's economy and worked to enhance the safety of communities in and about waterways and the functionability of the many major harbors in my home State of Hawaii. In everything they do they safeguard the environment.

From civil works projects navigation, flood control and shore protection to building and maintaining the infrastructure for our military personnel, the Honolulu District is proud of its service.

The U.S. Army Corps of Engineers' missions in the Pacific region have expanded exponentially since the unit's conception in 1905 when LT John Slattery was designated as Honolulu District Engineer on the Island of Oahu.

The mission of the Twelfth Lighthouse District was to design and construct lighthouses for navigation, acquire land for military fortifications, improve the harbors and expand the Corps' services to other Pacific islands.

In its first 100 years, the Honolulu District has supported the military in peace and in war, helped protect the island from enemies and forces of nature, protected the environment and wetlands, and added to Hawaii's economic growth.

HED's legacy includes: the creation of Sand Island; the acquisition of Fort DeRussy area in Waikiki; the expansion of Honolulu Harbor; the repair of Hickam, Wheeler and Pearl Harbor airfields after the December 1941 attack; the construction of the National Memorial Cemetery of the Pacific at Punchbowl, the Tripler Army Medical Center, the Hale Koa Hotel and numerous military and federal construction projects; and the creation of the Kaneohe-Kailua Dam, as well as a host of disaster mitigation and assistance measures.

At the beginning of the 20th century, HED constructed six deep-draft harbors on the five major Hawaiian Islands and three crucial lighthouses for navigation.

Under Slattery's command, the District began transforming the swampy coral reef used as a quarantine station in Honolulu Harbor into what is now known as Sand Island. Lt. Slattery's contributions are honored today with the Lt. John R. Slattery Bridge which connects Sand Island with the City of Honolulu.

He later purchased the 74-acre Fort DeRussy area in Waikiki for just $2,700 an acre for use as a military fortification. At the time, the land was little more than a swampy parcel. Today the area provides a valuable green oasis in the heart of Waikiki.

Throughout the 20th century, HED supported Oahu's defense by building a multitude of coastal fortifications including Pearl Harbor, Forts Ruger,